#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014170

Address: 333 Burma Road **Date Inspected:** 12-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: Tower Components** 

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

## TOWER YARD (NORTH OF OBG TRIAL ASSEMBLY YARD)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005717

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

PADEYE OF FACADE – 47.6M

 $SL3 - 47.6 - 8 \sim 14$ 

 $SL3 - 47.6 - 22 \sim 28$ 

#### Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

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PADEYE OF FAÇADE – 47.6M

SL3 – 47.6 – 9; 12 – Green Tag # 12571

SL3 – 47.6 – 22; 25 – Green Tag # 12572

**BAY#10** 

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW):

Weld joint #35A located on South Tower Lift – 5 SSD1 – TL5 – 1B – F. Welder is identified as 500363. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - B - U3b. (See attached photo)

Weld joint #1A located on South Tower Lift – 5 SSD1 – TL5 – 1B – F. Welder is identified as 500373. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - B - U3b.

Flux cored Arc Welding (FCAW):

Weld joint #26 located on Bearing Stiffener of Shear plate WD1 – A22A/B. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F.

Weld joint # 18 located on Bearing Stiffener of Shear plate WD1 – A22A/B. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F.

**BAY#11** 

This QA Inspector observed the following work in progress:

Flux cored Arc Welding (FCAW):

Weld joint #27 located on Bearing Stiffener of Shear plate WD1 – A25B/E. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F.

Weld joint # 04 located on Bearing Stiffener of Shear plate WD1 – A25B/E. Welder is identified as 049541. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F. (See attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## **Summary of Conversations:**

No Relevant Conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer